UNCLASSIFIED

AD NUMBER AD391449 **CLASSIFICATION CHANGES** TO: unclassified confidential FROM: LIMITATION CHANGES TO: Approved for public release, distribution unlimited FROM: Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 01 MAY 1968. Other requests shall be referred to OACSFOR, DA, Washington, DC 20310.

AUTHORITY

31 Dec 1974 per document marking.

GENERAL DECLASSIFICATION SCHEDULE

IN ACCORDANCE WITH DOD 5200.1-R & EXECUTIVE ORDER 11652

THIS DOCUMENT IS:

CLASSIFIED BY

Subject to General Declassification Schedule of Executive Order 11652-Automatically Downgraded at 2 Years Intervals-DECLASSIFIED ON DECEMBER 31, 1974

Defense Documentation Center Nefense Supply Agency Cameron Station

Alexandria, Virginia 22314

SECURITY MARKING

The classified or limited status of this report applies to each page, unless otherwise marked.

Separate page printouts MUST be marked accordingly.

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF THE ESPIONAGE LAWS, TITLE 18, U.S.C., SECTIONS 793 AND 794. THE TRANSMISSION OR THE REVELATION OF ITS CONTENTS IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW.

NOTICE: When government or other drawings, specifications or other data are used for any purpose other than in connection with a definitely related government procurement operation, the U. S. Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use or sell any patented invention that may in any way be related thereto.



DEPARTMENT OF THE ARMY
OFFICE OF THE ADJUTANT GENERAL
WASHINGTON, D.C. 20310

IN REPLY REFER TO AGAM-P (M) (2 Jul 68)

FOR OT RD 682044

15 July 1968

IUL 3 C 1968

SUBJECT: Operational Report - Lessons Learned, Headquarters, 2d Howitzer Bn, 35th Arty, Period Ending 30 April 1968 (U)

SEE DISTRIBUTION

This document contains information affecting the National Defense of the United States within the manage of the Espionage Laws, Title 18, U. S. I., Seek on 188 and 794. Its transmission or the revelation of its contents in any namer to an unauthorzied person is prohibited by law.

- 1. Subject report is forwarded for review and evaluation in accordance with paragraph 5b, AR 525-15. Evaluations and corrective actions should be reported to ACSFOR OT RD, Operational Reports Branch, within 90 days of receipt of covering letter.
- 2. Information contained in this report is provided to insure appropriate benefits in the future from lessons learned during current operations and may be adapted for use in developing training material.

BY ORDER OF THE SECRETARY OF THE ARMY:

l Incl as

KENNETH G. WICKHAM Major General, USA The Adjutant General

DISTRIBUTION:

Commanding Generals

US Continental Army Command

US Army Combat Developments Command

Commandants

US Army War College

US Army Command and General Staff College

US Army Adjutant General School

US Army Air Defense School

US Army Armor School

US Army Artillery and Missile School

US Army Aviation School

US Army Chemical School

US Army Civil Affairs School

US Army Engineer School

US Army Infantry School

US Army Intelligence School

Regraded unclassified when separated from classified inclosure.

DISTRIBUTION (Cont'd)

US Army Medical Field Service School

US Army Military Police School

US Army Missile and Munitions School

US Army Ordnance School

US Army Quartermaster School

US Army Security Agency School

US Army Signal School

US Army Southeastern Signal School

US Army Special Warfare School

US Army Transportation School

Copies furnished:

Office, Chief of Staff, US Army

Deputy Chiefs of Staff

Chief of Engineers

Chief of Research and Development

Assistant Chiefs of Staff

The Surgeon General

The Provost Marshal General

Research Analysis Corporation (Library)

OSD(SA), Assistant for Southeast Asia Forces

Defense Documentation Center

Director, Weapons Systems Evaluation

Commanding Generals

US Army Weapons Command

US Army Materiel Command

Senior Army Representative, Education Center, Marine Corps Development \sim Education Command

Project Manager, Naval Inshore Warfare Project Office (PM-12)

Commanding Officers

US Army Logistics, Doctrine Systems & Readiness Agency

US Army Limited War Laboratory

3d Battalion, 197th Artillery 1st Squadron, 18th Air Cavalry (Sep)

336th Ordnance Battalion (Ammo)

2d Battalion, 138th Artillery

2d Bn, 35th Arty

DEPARTMENT OF THE ARTICLERY HMMDQUARTERS, 2D HOWITZER BATTALION, 35TH ARTILLERY APO San Francisco 96376

AVGAY-C

1 May 1968

SUBJECT:

Operational Report for Quarterly Period Ending 30 April 1968 Reports Control Symbol CSFOR-65 (U)

THRU:

Commanding Officer 54th Artillery Group ATTN: AVGA-C

APO San Francisco 96376

Commanding General II Field Force Vietnam Artillery ATTN: AVFB-FAC APO San Francisco 96266

Commanding General
United States Army Vietnam
ATTN: AVHCC-DH
APO San Francisco 96266

Commander-In-Chief United States Army Pacific ATTN: GPOP-OT APO San Francisco 96558

TO: Assistant Chief of Staff for Force Development Department of the Army Washington, D. C. 30210

DOWNGRADED AT 3 YEAR INTERVALS; DECLASSIFIED AFTER 12 YEARS. DOD DIR 5200.10

FOR OT RD 682044

SECTION I SIGNIFICANT ORGANIZATIONAL OR UNIT ACTIVITIES

1. (C) Personnel and Administration:

- a. The 2d Howitzer Battalion, 35th Artillery remains assigned to the 54th Artillery Group with the mission of General Support, II Field Force.
- b. Headquarters and Headquarters Battery maintained a base camp at XUAN LOC, YT473097. Battery B maintained a base camp at XUAN LOC until 31 March when they moved their supply facilities to LONG BINH, YTC56116, in the Service Battery area. Battery A maintained a permanent case camp at NUI DAT, YS428665. Battery C has no permanent base camp but maintains storage facilities at Service Battery. Service Battery maintained a permanent base camp at LONG BINH, YNO56116.

c. Command changes:

- (1) Captain Albert E Carlson, 099143, assumed command of Battery C from Captain Hartmuth D Guenther, 0F113647, on 15 March 1968.
- (2) First Lieutenant Vernon F C Zopes, 05420302, assumed command of Headquarters and Headquarters Battery from First Lieutenant Alden L Roberson, 05333213, on 22 April 1968.
- d. Normal S1 activities were conducted during the period 1 Feb 68 through 30 April 1968.
 - e. Personnel strength as of 30 April 1968 was as follows:

UNIT	IA GOT	JTH	GC	O AUT	Hi	<u> </u>	SSIGN	<u> </u>
	OFF WO	121	OFF	WO	<u> 134</u>	OFF	WO	11/1
HQ	15 0	112	15	1	129	13	0	136
Ā	3 0	117	5	0	121	4	0	115
В	3 0	117	5	0	121	4	0	128
C	3 0	117	5	0	121	5	0	126
SVC	_3 3	82	_3	3	82	_3	3	_75
LATOT	27 3	545	33	4	574	<u>.</u> 29	3	580

*General Order Number 80, HQ, 5th Army, dated 20 April 1966, authorized the strengths shown. The present MTOD for this unit reflects these figures.

f. The following critical NCO shortages exist:

<u>MOS</u>	TITLE	GRADE	<u> AUTH</u>	SHORT
13E40	Recon Sergeant	SGTE5	8	3
35D20	liot Ballistics Equ	ip Mech SP5E5	1	1

g. Personnel changes during the reporting period included:

	OFF	<u>WO</u>	<u>IM</u>
Grins	5	1	140
Losses (DLROS)	3	2	134
Infusion	1	0	6
Transfer	3	0	1

7

CONFIDENTIAL

цf

h. Casualties included:

TYPE	NULBER
Killed In Action	1
Wounded In Action	40
Missing In Action	Ö
Non-Battle Dead	. 1
Non-Battle Missing	Ò
Non-Battle Casualties	9

i. Pertinent medical service statistics:

Total patient visits	284
Admitted to hospital	:41
Malaria cases	~'o

j. Judicial and Non-Judicial Punishment:

SPC - 1 SCM - 1 Art 15's - 13

k. Awards and decorations:

Silver Star	1
Bronze Star	Å
Air Medal	\tilde{L}
Army Commendation Medal	15
Purple Heart	40

1. Reportable accidents:

Personnel - 4 Vehicles - 4

m. RecR:

(1) Out of country:

Hawaii - 15	Australia - 9	Tokyo - 5
Hong Kong - 5	Manila - 1	Singapore - 6
Bangkok - 9	Tainei - 19	•

- (2) In-country: Vung Tau 8
- n. Safety:
- (1) Analysis: There were eight accide is in the battalion during the period 1 Feb 68 to 30 Apr 68. The eight accidents were caused by carelessness and inattentiveness on the part of the individuals concerned. One of the four vehicle accidents was reportedly caused by mechanical failure (the brakes failed to function on a 3/4-ton vehicle).
- (2) Corrective Actions: Battery commanders have been directed to emphasize to each member of their command the necessity for individual instruction on driver safety and accident prevention. A policy for convoy movements has been initiated that will insure that all NCO's and drivers are briefed on road conditions and specific hards to be especially alerted for prior movement.

o. Commander's Notes:

(1) Span of Control: The span of control of the battalion continues to be heavily taxed due to the great distances between battalion headquarters and the firing batteries. During periods of attachment, the battalion remains charged with personnel administration, gunnery standards and maintenance supervision of the firing batteries. The distance between firing batteries and battalion headquarters and the service elements of the battalion varied up to 180 kilometers. Helicopter transportation become the key to effective supervision and to expediting maintenance activities. The battalion is currently receiving an allocation of four and a half hours of helicopter time per day. (See Incl 3).

(2) Maintenance:

- (a) Battery C was attached to the 9th Inf Div at DONG TAM for the period 6 Nov 67 to 6 Mar 68. Maintenance support for the M109 howitzer was not available at DONG TAM, since the 9th Inf Div had none of these weapons in the division. Maintenance support was established through liaison with the 2d Maintenance Battalion at VUNG TAU. An extremely profitable maintenance plan was developed, in cooperation with the 2d Maint Bn, i.e. to barge one M109 and its companion M548 to VUNG TAU for overhaul and annual maintenance. Although this program took one howitzer out of action for a period of 7-10 days, the material readiness of the battery was markedly improved. This scheme was developed further with the return of Battery A to NUI DAT base camp. The use of adequate shop facilities with the ready availability of technicians and spare parts improved the operational capability of and prolonged the life of the M109 howitzers.
- (b) Battalion Maintenance Operations: The battalion maintenance section was previously located in XUAN LOC and piece-mealed cut to each of the firing batteries. The battalion maintenance section was relocated in LONG BINH where parts access, road network and available transportation have materially reduced the battalion deadline rate. The 185th Light Maintenance Battalion has been extremely cooperative in expediting the repair of the aged N109 howitzers acsigned to this battalion.
- (c) M548 Deadline Rate: The M548 continues to be a high deadline item in this battalion. For this reporting period, the total days available were 1401 for a percentage availability of 91%. An analysis of causes for deadline shows the main contributing factors were ineffective operational maintenance and excessive loads on convoy movements. In an attempt to rectify this condition, positive command emphasis has been focused on the supervision of maintenance. Allowable loads on the M548's have been established at 4.5 tons. A loading plan for forty-two complete rounds, sufficient propellant and fuzes and defersive materials is now being used. The load is so positioned as to permit error "during operation—at halt" maintenance to be performed without removing the load from the cargo deck.
- d.) On 17 April 1968, the battalion received the first of eighteen fifth year model M109 howitzers. As of 30 Apr, fifteen have been issued. The other three howitzers will be issued during the month of May. At the present time, Batteries A and B have six new howitzers each, while Eattery C has three.

2. (C) Operations:

- a. Battalion deployment and missions as of 1 Feb 68 were as follows:
- (1) Headquerters and Headquerters Battery was located at XUAN LOC, YT 472097 and provided normal support to the battalion in addition to providing for XUAN LOC base camp defense.
- (2) Service Bettery was located at LONG BINH, Y7056116, and provided normal support to the battalion.
- (3) Battery A was located at FS/PB NASHUA, XT988323, with the mission of GSR, 101st Abn DivArty OPCON for fires to the 1st Bn, 319th Arty during Operation EUENA VISTA.
- (4) Battery B was located at FS/PB ANDLRSON, YT205127, General Support, IIFFORCEV with priority of fires to the 1st Royal Australian Task Force during Operation COBURG.
- (5) Battery C was located at DONG T/M, XS413432, attached to the 9th Inf DivArty and further attached to the 1st Bn, 84th Arty with a mission of Reinf the 3d Bn, 34th Arty during Operation CORONADO.
- b. Battery A, from its position at FS/PB NASHUA, X1988323, had the mission of GSR, 101st Abn DivArty during Operation BULMA VISTA until 11 Feb 68. Bettery A then moved to BIEN HOA POST, YTO26156 for one night, keeping the same mission and supporting operations in AO UNIONTOWN. On 12 Feb 68, Battery A moved to FS/PB CONCORD, YTO35175, with the mission of GSR, 101st Abn DivArty in the area of Operation UNIONTOWN. On 1 Mar, Battery A moved to their base camp at NUI DAT, YS428665, with a mission of GS, IIFFORCEV, Reinf the 4th Royal Australian Field Regiment. Battery A moved from NUI DAT on 17 Mar to a FS/PB located at YS493618 and assumed the mission of GSR, 4th RAFR. The battery remained in this location until 15 Apr when it returned to its base camp at NUI DAT. At this time the unit's mission changed to GS, IIFFORCEV, Reinf the 12th RAFR, due to the rotation of the australian units. On 23 Apr, Battery A moved to a FS/PB at YS248775 with their mission unchanged. On 25 Apr, Battery A again returned to base camp at NUI DAT continuing their mission until the end of the reporting period.
- c. Battery B: From 1 Feb to 18 Feb, Battery B continued to support Operation COBURG with a mission of GS, IIFFORCEV, with priority of fires to the 1st Australian Task Force. On the night of 18 Feb, Battery B was attacked by an estimated battalion size force. A mortar/rocket attack was followed by an intensive ground attack (See 2e(2) and Section II, pare 2a, below). On 28 Feb, the battery received a mortar attack resulting in 20-30 rounds impacting in the area. On 1 Mar, FS/PB ANDERSOM was closed and Battery E moved to FS/PB CONCORD, YT 035175, with a mission of GSR, 101st Abn Divarty OPCON for fires to the 7th Bn, 8th arty. Battery B departed FS/PB CONCORD on 17 Mar and crossed the DONG NAI RIVER, at night, by Lending Craft Mechanized (LCI) and arrived at FS/PB LOIS, YT043245, on 18 Mar. The unit's mission while at FS/PB LOIS was GSR, 2d Bn, 40th Arty. On 29 Mar, Battery B departed FS/FB LOIS and moved to BIEN MCA, YT026148, with a mission of GS, IIFFORCEV, with priority of fires to the DONG NAI ARIA. Battery B departed BIEN MCA on 31 Mar and moved to CU CHI, XT646162, with a mission of GSR, 25th Inf Divarty. On 1 Apr, Battery B was attached to the 25th Inf Div with a mission of GSR, 2d En, 40th Arty and moved to FS/PB BOLT, XT261386.

The battery remained in this position until 12 Apr when they moved to FS/FB GRANT, XT387625, with a mission of GSR, 3d Bn, 77th Arty. It was here that the battery supported 25th Inf Div units during Operation TOAN THANG, assisting in achieving a body count of over 200 VC KIA's. On 20 Apr. Battery B moved to FS/PB STUART, XT504193, remaining overnight prior to moving to FS/PB PIKE VI on 21 Apr, with a mission of GSR, 25th Inf DivArty where they remained until the end of the reporting period.

d. Battery C: (For TET Offensive action, see 2e(3) below) On 3 Feb, Battery C moved to DONG TAM, XS409443 and continued to support Operation CORONADO. On 10 Feb, Battery C moved to LONG DINH BRIDGE, XS382494, and as a result their mission changed to DS, 5th Bn, 60th Inf during Operation COROMADO. Their mission was again changed on 17 Feb to DS, 2d Bn, 39th Inf. Battery C again had a mission change on 19 Feb to GS, 1st Ede, 9th Div. On 20 Feb, Battery C moved by Landing Craft Utility (LCU) on a two day trip to CAN THO, WR\$45090, with a mission of GSR, 3d Bn, 34th Arty. While enroute Battery C received small arms and automatic wearons from the shore which was returned with unknown results. On 21 Feb, Battery C arrived at BINH TUY, WS 810148. From BINH TUY, they moved ovorland to PHUNG HIEP, WR905845 on 22 Feb. On 23 Feb, Battery C roadmarched back to CAN THO where they were loaded on LCU's for the trip to DONG TAM, arriving at that location on 24 Feb. Throughout the period at DONG TAM, Bettery C retained their mission of GSR, 3d Bn, 34th Arty. During the TET Offensive, Battery C received mortar rounds on several occasions totalling 311 rounds. Damage throughout the period was slight and casualties were minor. On 6 Mer 62, Battery C moved from DONG TAM to FS/PB PARIS, YT 133082, with the mission of GS, IIFFORCEV Reinf 2d Bn, 40th Arty. On 18 Mar, Battery C moved to a FS/PB north of the ARVN compound at TAN UYAN, XT967232, with a mission of GSR, 2d En, 40th Arty, priority of fires to the Vietnamese Marines. On 21 Mar, Battery C moved to FS/PB CONCORD, YT 035175 with the mission of GS, IIFFORCEV priority of fires to the 2d Bn, 319th Arty OPCON for fires to the 7th Bn, 8th Arty. Battery C remained in this position until 12 Apr when it split into two platoons. One platoon remained at FS/PB CONCORD with the same mission while the other platoon moved to CAY GAIO PLANTATION, FS/PB FARRELL, YT328268 to participate in Operation TOWN THANG, with the mission of GS, IIFFORCEV Reinf 2d Bn, 40th Arty. On 24 Apr, Battery C Forward moved from FS/PB FARRELL to FS/PB TRI-CORNERS, YT208126, retaining the mission of GS, IIFFORCEV Reinf 2d Bn, 40th Arty. Battery C has remained split until the end of the reporting period. (After Action Report: Riverine Operations - M109 Howitzer Battery - Inclosure 1)

e. TET Counteroffensive:

- (1) Battery A: At the outbreak of the VC TET Offensive, the battery was located at FS/PB NASHUA. There was no significant contact in the area throughout the entire period.
- (2) Battery B: This battery was located at FS/PB ANDERSON which was attacked by a battalion sized force on 18 Feb. The battery underwent an intensive ground attack preceded by an intense mortar/rocket attack. Battery B suffered one KIA and twenty-two WIA on that occasion. One howitzer was reduced to inoperable condition after being struck by an RPG-2 round which penetrated the turret. Four other battery vehicles suffered moderate to severe damage in the mortar/rocket attack.

- (3) Bettery C: Bettery C was located at GIAO DUC, west of MY THO in support of the 2d Bde, 9th Inf Div at the beginning of the offensive. After the US forces had displaced to DONG TAM; MY THO area, Battery C was withdrawn by ICU's. The embarkation was made under harrassing morter and sniper fire. While enroute to DONG TAM, the ICU's were divorted to pick up forty US Government employees at VINH IONG. The battery used DONG TAM as its fire support/patrol base in supporting the 9th Inf Div elements along Route 4 and MY THO. Their position was mortared every night for a week with a total of 311 rounds impacting in their area. However, only three persons were wounded and light damage to equipment was suffered. During the period of the TET Counteroffensive, the battery fired as many as one-thousand, six-hundred and forty-two rounds of 155mm ammunition in a single day.
- (4) Headquarters and Headquarters Battery: Located at the provincial capital of XUAN LCC, the battalion headquarters and Headquarters Battery were engaged in defense of the city and support of units in the field. The base camp, which also housed Battery C, 7th Bn, 9th Arty, a 105mm battery, received over eighty mortar rounds on the night of 31 Jan and fifty additional rounds on the night of 1 Feb. Casualties for all units on the compound totalled one KIA and eighteen WIA's.
- (5) Service Battery: Service Battery was instrumental in aiding the defense of the LONG BINH-PLANTATION area. Service Battery received several 122mm rockets and a heavy volume of small arms and automatic weapons fire. Despite the intenisity of the fire, no casualties were suffered.

f. Fire Missions Summary:

MONTH	BATTER	Y L	BATTER	YB	BATTER	Y C	EATT/.L	JON TOT/.LS
	Msns	Rds	Msns	Rds	Msns	Rds	Msns	Rds
Feb 68	1104	3500	948	6106	600	12496	2652	22102
Mar 68	932	3311	1758	7227	1346	6043	4036	16581
1pr 63	922	3187	1447	5593	3548	10713	5917	<u> 19493</u>
TOTALS	2958	9998	4153	18926	5494	29252	12605	58176

g. Surmary of Operations: During the reporting period, units of the bettelion perticipated in the following combat operations:

(1)	UNIONTOWN	(6)	BOX SPRINGS
(2)	COBURG	(7)	VALLEY FORGE
(3)	CORONADO XVI	(8)	PINAROO
(4)	TET COUNTEROFFENSIVE	(9)	WILDIRNISS
(5)	HARRISBURG	(10)	TOAN THING

3. (C) Training and Organization:

a. Scheduling of mandatory training subjects for the battalion is accomplished by battalion operations. The implementation of the subjects is accomplished at the batteries. While on operations, suitable subjects are integrated into the normal performance of duties. To maintain, improve and expand job skills, within the battalion, on-the-job training and cross training are given continuously.

- b. On 27 Feb and 5 Mar, a gas chamber exercise was administered to Headquarters and Headquarters Battery personnel as an annual requirement and to check the serviceability of protective masks.
- c. During the period 1 Feb to 30 Apr, sixty-five newly assigned personnel received in-country training at the Redcatcher Training School of the 199th Light Infantry Brigade.

10

- d. During the period 1 Feb to 30 Apr, 'all firing bettery personnel were administered the Gunner's Qualification Test, resulting in fifty six personnel passing the test.
- e. FDC training and testing were conducted during the reporting period for all FDC personnel.
- f. On 21-22 Apr, the battalion hosted a forward observer training course for twelve officers and twenty-five NCO's from LONG BINH POST. The training included:
 - (1) Duties of the observers
 - (2) Call for Fire
 - (3) Adjustment of Fire
 - (4) Service Practice

The service practice was the highlight of the course. It was begun by orienting the student observers, identifying the reference points and conducting a terrain study. A short demonstration was conducted by Battery B, 7th Bn, 9th irty which included:

- (1) Shell, WP, 400m HOB
- (2) Shell, HE, on the ground
- (3) Shell, HE, 400m ranging rounds
- (4) Shell, HE; Fuze, VT

Four "round robin" missions were fired with student observers making calls for fire and corrections. A running critique was conducted by the OP instructor after the call for fire, each correction and each mission. This enabled maximum participation by the students.

- g. The following training courses were attended by battalion personnel which were conducted outside the battalion:
- (1) A two hour security briefing (communications) was attended by thirteen officers and enlisted men from Headquarters Bettery at 54th Artillery Group Headquarters in XUAN LCC on 22 March.
- (2) Five personnel, one from each battery, attended PLL classes conducted by the 19th Maint En in LONG BINH from 16-19 April.
- (3) Two officers attended a FADAC Training Course conducted by the 23d Artillory Group in PHU LOI from 1-5 April.

CONFIDENTIAL

V

- (4) One man from each of the five batteries attended an eight hour course on M16 maintenance and repair on 10 Mar. The instruction was presented by the USARV Mobile Training Team at the 7th Bn, 8th Arty in BITH HOA.
- 4. (C) Intelligence:

á

- a. The battalion continued its visual reconnaissance program in the portion of LONG KHANH SECTOR assigned to the 2d How Bn, 35th Arty by the 54th Artillery Group. The VR Program had the following objectives:
- (1) Acquiring intelligence information through planned, systematic and thorough aerial visual reconnaissance. One-hundred and ninety-eight sightings were made to include bunkers, trails and base camps.
- (2) Recommending targets for attack by artillery and requesting tactical air support if needed. Sixty-six targets were recommended for attack and of those sixty-six, twenty-seven were destroyed with artillery, eighteen with aircraft ordnance, and twenty-nne were given negative clearance.
 - (3) Adjusting artillery fires within the assigned VR areas.
- (4) Conducting registrations for artillery units located within the 2d How Bn, 35th Arty area of operations. One-hundred and nine artillery registrations and thirty-one convoy cover missions were made during this period.
 - (5) Visually checking the reports of enemy sightings.
- (6) During the period a total of three-hundred and fifty-three hours, and one-hundred and eighty-four missions were flown by Artillery AO's of the 2d How Bn, 35th Arty.
- b. Person to person contact has been initiated between the S2 section and the intelligence gathering sources in the XUAN LCC area to include:
 - (1) 18th ARVN Div G2
- (4) American Advisors to National Police
- (2) Long Khanh Sector HQ
- (3) National Police HQ
- (5) S2, 54th Artillery Group
- c. Base camp physical security:
- (1) A new guard bunker, designated as Post 7, has been constructed at the midpoint of the north berm, between Post 6 and Post 8 in the base camp at XUAN LCC.
- (2) Thirty-five perimeter lights, thirty meters apart, have been installed eround the XUAH LOC base camp borm and provide illumination for an area up to fifteen meters in front of each guard bunker with intersecting beams of light.
- (3) A specified amount of armunition has been placed in each bunker under lock and key, consisting of flares. fragmentation granades, M-14 and M-60 ammunition and one M-72 LAW per bunker

(4) Two new ammunition bunkers have been constructed at strategic points on the southwest corner of the berm at XUAN LOC base camp for the storage of CS grenades and trip flares.

12:

5. (C) Logistics:

a. Montily Vehicle Availability Percentage:

TYPL VEHICLE	PERCENTAGE OF AVAILABILITY				
	FiB	MAR	APR	<u>OTR</u> 93%	
M109	<u>Fi:B</u> 91%	93%	94%	93%	
M548	89%	92%	91%	91%	
M578 VTR	62%	58%	63%	62%	
M88 VTR	49%	100%	100%	83%	
M577Λ1	79%	77%	80%	79%	
Wheelod Vehicles	86%	88%	95%	90%	

b. Ammunition resupply by rounds:

TYFE AMMUNITION	<u>FTB</u>	MAR	APR	TOTAL
HE	20909	17090	16728	51.727
WP	845	327	385	1557
ILL	1018	432	706	2156

c. Miles traveled by Service Battery ammunition trains:

FEB - 1718 miles MAR - 1547 miles APR - 2744 miles TOTAL - 6009 miles

d. Approximate tonnage of class I-IV resupply handled by SVC Btry: (All figures are reflected in tons)

	FLB	M'.R	<u>APR</u>	TOTAL
Class I	3.9	45.6	10.0	59 . 5
Class II and IV	6.4	27.3	4.7	38.4
Class III	0.0	3.8	6.4	10.2

e. Mumber of aerial resupply missions flown in support of firing batteries:

	FLB	MAR	APR	TOT/.L
Class I-IV	5	32	21	<u>5</u> 8
Class V	32	43	7	122

6. (C) Other:

- a. Civic Actions:
- (1) Specific civic actions: Screen windows were built and installed in one of the patient wards at the Phillipine hospital in XUAN LCC.
 - (2) Tot Aggression Rollief Program: Contributions \$140.00
 - (3) MEDCAP's: Three MEDCAP's with 470 patients treated.

b. Communications:

3

CONFIDENTIAL

- (1) The AN/GRC-46 Radio Teletypowriter Sets are presently located in Pattery A, Battery B and Headquarters Battery. Battery A and B have on-line crypto capabilities at present. Battery C does not have crypto capabilities due to shortages of equipment. Shortage equipment is on requisition.
- (2) light-hundred and sixty-seven messages were transmitted and recieved by RTT through the message center during the reporting period.
- (3) Speech security equipment has been installed with Service and B Batteries enabling secure FM radio messages to be transmitted to and from battalion headquarters.

SECTION II PART I - OBSERVATIONS (LESSONS LEARNED)

- 1. (U) Personnel and Administration: None
- 2. (C) Operations:
 - a. ITaM: Recent Combat Actions TET Offensive

OBSERVATION: During the enemy's recent TET Offensive, many lessons were learned in the area of perimeter defense, fire support coordination, and delivery of self-protective fires. On the night of 18 Feb 68, Battery B was attacked by an estimated battalion sized force at FS/PB ANDERSON. A mortar/rocket attack preceded an intensive ground attack by the enemy force. In some instances, RFG (rocket propelled grenade) rounds were fired from as close as twenty meters. The action resulted in the loss of one howitzer, moderate to severe damage to four wheeled vehicles, one US KIA and twenty-two US WIA's

EVALUATION: It was found that maximum utilization of artillery and gunships could be obtained if proper boundaries, fire coordination lines and flight corridors were used. Using this system, the battery was able to employ three other artillery batteries for defensive concentrations on one side of its position area while gunships were employed from the other side. Despite the intensity of the attack, battery personnel defended the area from tactically placed two-man, steel culvert, sandbagged bunkers. The howitzers and other vehicles were dug in to lower their silhouettes and a dirt berm was placed around the equipment affording it rocket and small arms protection. Enemy casualties were four confirmed VC KIA's on the battery perimeter and mincteen total VC KIA's around the FS/PB. During this action the battery fired direct fire, charge 1, fuze time with high explosive and white phosphorus ammunition. This fire was detonated as close as 300 meters from the FS/FB perimeter, silencing automatic weapons, small arms and mortar fire. Fire could not be brought any closer without increasing the possibility of shrapnel blow-back.

b. ITEM: Kight River Crossing - M109 Howitzer Battery

OBSERVATION: On the night of 17-18 Mar 68, Bettery B conducted a crossing of the DONG NAI RIVER in conjunction with elements of the 11th ACR and the 199th Lt Inf Bde. The river crossing was accomplished with difficulty over hastily constructed LCM loading and off-loading sites. ALC's from the

11th ACR crossed without difficulty using only one LCM. The first M109 howitzer met with difficulty during off-loading from the LCM. Insufficient bank preparation and improper demolition usage weakened the bank to the point that the 27 ton M109 became mired in the river bank. Bulldozers and APC's had to be used to pull it out of the mud. Considerable improvements had to be made before the river crossing could be completed without difficulty.

EVALUATION: Considerable engineer effort is required to properly prepare a landing site for M109 howitzers. Leveling, packing and placement of pierced steel planking are absolutely essential to a timely and successful hasty crossing. The LCM is a satisfactory vessel to be used for river crossing with an 1109 firing battery.

c. ITM: Operation of FADAC under Dusty Conditions:

OBSERVATION: During the dry season in Vietnam, the large volume of dust present collects on the FADAC table and causes air filters on the FADAC to become clogged. Doily cleaning and maintenance of the FADAC air filters is often insufficient to cope with the problem.

EVALUATION: Covering the console of the FADAC and the table area below the air filters with a damp cloth will provent most of the dust from collecting on the FADAC. Prior to turning the FADAC on, the damp cloths are removed and the operational area is relatively dust free.

ITM: Pre-Cut Ammunition Bunkers

OBSERVATION: Supporting framework for ammunition bunkers was prepared in Battery A base camp at NUI DAT for use at field locations. Bunkers are planned to be 22 feet, o inches in length and 5 feet square each. The following materials are needed to construct one bunker:

12 - 4" X 4" boards, 4' 8" long (uprights)
7 - 4" X 4" boards, 5' 4" long (floor supports)
3 - 4" X 4" boards, 15' long (frame)
3 - 4" X 4" boards, 7' 6" long (frame)
20 - 2" X 6" boards, 5' 4" long (roof supports)
7 - 2" X 6" boards, 15' long (siding)
7 - 2" X 6" boards, 7' 6" long (siding)
8 - 2" X 6" boards, 7' 6" long (siding)

8 - 2" X 4" boards, 41 long (braces)

15 - Sheets of tin

800 - sandbags

100 - "20 penny" nails

125 - "16 penny" nails

Two identical bunkers are built facing one another approximately ten feet apart. An additional 300 sandbags are required to construct the barrier wall between the bunkers. Salvage canvas is placed in front of each bunker for additional weather protection.

LVALUATION: The pre-cut bunkers proved very satisfactory on the first testing in the field. Time of construction of ammunition bunkers was reduced by fifty percent. Two or three men can assemble the bunker while the remainder of the men fill sandbags. The bunkers meet all ammunition storage requirements to include dunnage and air space. Additionally, uniform construction of each howitzer position facilitates position organization and also gives a unit commander the capability of accurately planning for materials needed to occupy a new area.

e. ITM: Large VS ompl) Defensive Bunkers

OBSERVATION: Large crew bunkers which house more than two people in a field position are not feasible for defense of the position area. The large bunkers require an excessive amount of building materials, construction and destruction time. Four pieces of standard 72" metal culvert material are required to construct a weather-proof bunker and provide good first round protection from hostile fire for two men. The bunker is designed to contain cots for sleeping, and to provide protection as a fighting position. Four sections of culvert are overlapped and placed on a sandbag foundation. Sandbags are stacked in the front and rear in such a manner as to allow firing of individual or crew-served weapons from inside the bunker and serve as blast shields for personnel. Three layers of sandbags are placed on top of the culvert section to provide adequate overhead cover. Approximately 200 sandbags are required for construction.

EVALUATION: Culvert bunkers are now the battalion standard. They provide good protection from weather and hostile fire. Additionally, culvert materials, while heavy, are compact, and accurate planning for position occupation is realized through the use of this system.

f. ITM: Fuze Time in Defense of Artillery Bettery Positions

OBSIRV. TION: The M109 howitzer with charge 7 and fuze quick has proven to be the most effective of all combinations of fuzes and charges because of its speed of progration and its terminal effects; however, if a mask is present or range to the target is close, then fuze time with a low fuze setting is used to allow closer detonation to the howitzer. Both charge 7 and charge 1 with fuze time have been used. The following data is based upon the fuze time, indirect fire technique:

CH_RC_	FUZE M564 SETTING AND QUADRANT	RESULTS
7	0.25 sec (direct fire scope)	hir burst occurred about 300m from tube. Shall fragments were recieved in the position. Of 49 rounds fired 5 base plates came into the battery position.
1GB	2.0 sec, QE 99	Air burst approx 25m high at 300m from tube. Shell fragments were received in position. Good effects were observed within 100m of burst.
1GB	2.5 sec, QE 99	Air burst, 20m high approx 380m from position. Very effective and safe for troops in position who are prone or kneeling.

Direct fire using various time settings (greater than those mentioned above) have been fired and have been found to pose no danger to troops. As a safety precaution, personnel not actively engaged in the mission should take cover during firing.

EVALUATION: Charge 7, fuze time, requires the settings of small fuze settings creating room for error (see above table). Charge 1GB with fuze time can be fired into areas bordering the perimeter and produces a large kill zone in the target arer. When using charge 1GB, the presence of the excess power bags creates a fire hazard inside the howitzer which is closed during an attack to furnish the crew protection from small arms fire, nortar fragments, RPG's and rockets.

16

3 Incl as MR THURNAN LTC, Artillery Couranding

- Riverine Operation
 Representative Positions During Reporting Period
- 3. Span of Control Chart

AVGA-C (1 May 68) 1st Ind

SUBJECT: Operational Report for Quarterly Period Ending 30 April 1968, Reports Control Symbol CSFOR-65

THRU: Commanding General, II Field Force Vietnam Artillery, ATTN: AVFB-FAC, APO 96266
Commanding General, II Field Force Vietnam, ATTN: AVFBC, APO 96266
Commanding General, United States Army Vietnam, ATTN: AVHGC-DST, APO 96375
Commander-In-Chief, United States Army Pacific, ATTN: GPOP-DT, APO 96558

TO: Assistant Chief of Staff for Force Development, Department of the Army; Washington, D. C. 20310

- 1. (U) The Quarterly Operational Report, Lessons Learned, from the 2d Battalion, 35th Artillery is considered adequate. Due to the wide range of operations in which this battalion was engaged during the period of the report, the observations outlined are worthy of special note. In particular, attention is invited to the after action report (Inclosure 1) submitted by the battery commander of the first M109 battery to operate for extended periods in the Delta area.
- 2. (U) With respect to para 10h(3)(a)(b)(c), Inclosure 1, the 2d Battalion, 35th Artillery has been directed to submit appropriate DA Forms 2407, if warranted.

JOHN J NORKIS Colonel, Artillery Commanding AVFB-FAC (1 May 68) 2nd Ind SUBJECT: Operational Report - Lessons Learned (RCS-CSFOR-65)

DA, HQ, I' FFCRCEV Artillery, APO 96266

2 9 MAY 1968

TiRU: Commanding General, II Field Force Vietnam, APO 96266
Commanding General, United States Army Vietnam, ATTN: AVHGC-DST,
APO 96375
Commander-In-Chief, United States Army Pacific, ATTN: GPOP-OF,
APO 96558

TO: Assistant Chief of Staff for Force Development, Department of the Army, Washington, D. C. 20310

- 1. (U) The quarterly report of the 2nd Buttalion, 35th Artillery (UIC: X582XX) adequately reflects the operations and lessons learned during the reporting period.
- 2. (U) Concur with the comments and recommendations in Section II of the report and the 1st Indorsement. The observations and evaluations contained in Section II of this report as well as the conclusions of Inclosure 1 are particularly noteworthy and should be carefully reviewed at all DA levels.

KAYMUND P. MURPHY Brigadier General, USA Commanding 19

AVFBC-RE-H (1 May 68) 3rd Ind SUBJECT: Operational Report for Quarterly Period Ending 30 April 1968 Report Control Symbol CSFOR-65 (U)

DA, HQ II FFORCEV, APO San Francisco 96266 114 JUN 1968

THRU: Commanding General, US Army Vietnam, ATTN: AVHGC(DST), APO 96375

Commander, US Army Pacific, ATTN: GPOP-OT, APO 96558

TO: Assistant Chief of Staff for Force Development, Department of the Army, Washington, D.C. 20310

- 1. Subject report is forwarded.
- 2. This headquarters has reviewed the attached Operational Report Lessons Learned of the 2d Battalion, 35th Artillery and concurs with it.

FOR THE COLMANDER:

O. B. FORV

Asst AG

AVHGC-DST (1 May 68) 4th Ind (U) SUBJECT: Operational Report for Quarterly Period Ending 30 April 1968 Reports Control Symbol CSFOR-65 (U)

HEADQUARTERS, US ARMY VIETNAM, APO San Francisco 963751 9 JUN 1968

TO: Commander in Chief, United States Army, Pacific, ATTN: GPOP-D'I APO 96558

- 1. This headquarters has reviewed the Operational Report-Lessons Learned for the quarterly period ending '0 April 1968 from Headquarters, 2d Howitzer Battalion, 35th Artillery.
- 2. Concur with report as submitted.

FOR THE COMMANDER:

C. S. NAKATSUKASA

Captain, AGC

Assistant Adjutant General

Copy furnished: HQ 2d How Bn, 35th Arty HQ II FFORCEV

GPOP-DT (1 May 68) (U) 5th Ind SUBJECT: Operational Report of HQ, 2d Bm, 35th Arty for Period Ending 30 April 1968, RCS CSFOR-65 (R1)

20 JUN 1368

HQ, US Army, Pacific, APO San Francisco 96558

TO: Assistant Chief of Staff for Force Development, Department of the Army, Washington, D. C. 20310

This headquarters has evaluated subject report and forwarding indorsaments and concurs in the report as indorsed.

FOR THE COMMANDER IN CHIEF:

C.L. SHORTT

CPT, AGC Asst AG

Officitt

INCLOSURE 1 (Riverine Operations - M109 Fountzer Battery) to Operational Ropert-Lessons Learned, 2d How Bn, 35th arty, dated 1 May 1968

- 1. The 2d Howitzer Battrlion, 35th Artillery was tasked to furnish one H109 Howitzer Battery to the Hekong Delta Dong Tam Base of the 9th Infantry Division. Battery C, 2d How Bn, 35th Arty was directed to accomplish this mission on 6 November 1967. The mission terminated on 6 Larch 1968. The following is a summary of the battery commander's after action report:
- 2. Task Organization: The battery was involved in combat operations with units listed below:
 - a. 1st Bde, 9th Inf Div
- e. Task Force Funston
- b. 2d Bdo, 9th Inf Div
- f. 7th ARVN Division
- c. 5th Inf Bn (VNMC)
- g. Task Force 117 Riverine Asseult Force
- d. Btry A & B, 1st Bn, 84th Arty
- 3. Supporting Forces:
 - e. 7th USAF

c. US army aviation

b. VMAF

- d. 19th and 246th PSYOPS Co's
- 4. Control or Command Hardquerters: 9th Inf Divarty; 2d Bde, 9th Inf Div. Battery C was attached to the 9th Inf Divarty and subattached to the 1st Bn, 84th Arty during the reporting period.
- 5. Intelligence: The disposition of enemy forces remained essentially stable throughout the period. Individual main force units moved within the province for tectical purposes, while local force elements appeared primarily engaged in local operations. No influx of new units or NVA elements was reported.
- 6. lissions:

06 Nov 67 - 13 Dec 67: GSR, 3d Bn, 34th Arty
14 Dec 67 - 11 Feb 68: Reinf 3d Bn, 34th Arty
11 Feb 68 - 18 Feb 68: DS, 5th Bn, 60th Inf
18 Feb 68 - 20 Feb 68: DS, 2d Bn, 39th Inf
20 Feb 68 - 25 Feb 68: Reinf 3d Bn, 34th Arty
25 Feb 68 - 06 Mar 68: GS, 1st Ede, 9th Inf Div

7. Concept of Operations: To displace from Bien Hoa, YTO25154 on 6 Nov 67 and move by read to Dong Tam, XS410443, to support the 2d Bde, 9th Inf Div during an operation tentatively scheduled for three weeks.

8. Execution:

a. Rattery C was alerted for movement to Dong Tam at 051600 Nev 68. The following morning at 0600 hours, the unit displaced from Bien Hos and arrived at Dong Tam at 1730 hours. During the following three weeks, the battery deployed on numerous operations in conjunction with the 2d Bde, 9th Inf Div. On 25 Nov, the battery's status and mission were extended for an indefinite period.

INCI 1

24

The nature of the commitment for the subsequent time span remained basically the same. It was characterized by the area to ten days in the field with an intervening two to four day rest and maintenance period at Dong Tam. Each time the battery closed at Dong Tam, it went into support of Task Force Funston. This called for the firing of H&I's, intelligence targets, contact missions and counter mortar/recket fires for base security elements and ARVN ground forces.

- b. On 2 Feb 68, the unit returned from FS/PB Giao Duc, WS975401, and began to support US forces engaged in the counter TET Offensive along dighway 4 and in and around My Tho. On 20 Feb 68, the bettery was recalled from its role in support of the 1st Bde, 9th Inf Div, and embarked for Can Tho and a subsequent roadmarch to Phung Hiep, WR904845. Here the unit assisted the 2d Bde in its attempt to relieve pressure on Can Tho by conducting a raid on the enemy's corp level headquarters to the southwest of Phung Hiep.
- c. After the battery returned to Dong Tam on 25 Feb 68, it remained in its static mission of Task Force Funston support until 6 Mar 68. At 1010 hrs on 6 Mar, the unit was relieved from its attachment to the 9th Inf Div and road marched from Dong Tam to FS/PB Paris, YT133082, and assumed missions of GS, IIFFORCEV and reinforcing the 2d Bn, 40th Arty.
- d. Husky Charlie, as the unit was known throughout the operational area, was the first 155mm SP artillery battery committed to the conflict in the Mekong Delta. A need for its presence arose because the 105mm barg-mounted artillery was restricted in its penetration of streams and canals, and a farther reaching, heavier projectile was required to fill gaps and to add desired destructive power. Initially, when the battery arrived, no experience factors were available and the battery was moving on virgin territory. With rerial reconnaissance seriously restricted due to security reasons, as well as non-availability of aircraft, the greatest amount of flexibility had to be maintained in the execution of plans. The unit met the ever present challenges and succeeded in providing what is a must for any artillery unit, namely, timely, accurate and effective fires.
- e. The bettery fired a total of 2,817 missions expending 38,136 rounds of ammunition during the operational period.

9. Results:

a. Friendly KIA: None

b. Friendly WIA: 6

All wounds were caused by enemy mortar fragments. Of those wounded, only one soldier required hospitalization. The remainder were treated on the spot and returned to duty.

- c. Equipment and Material Losses: Assorted tires, fuel tanks, radiators, mess equipment and personal clothing damaged by mortar rounds.
 - d. Enemy KIA: 201 confirmed
 - e. Enemy WIA: Unknown
 - f. Structures destroyed or damaged: 49 huts and 18 sampans
 - g. Kilometers traveled by weter and land: 1,500 km

10. Administrative Matters:

The state of the s

- a. Personnel Records and Pay: Although the bettery was attached to the 9th Inf Div, all records continued to be maintrined by the parent unit.
- b. Mail: Mail and distribution were delivered by battalion representatives at frequent intervals, normally every other day. No hardships were experienced.
- c. Rest and Recreation: A normal R&R program was maintained. Personnel bound for out-of-country R&R sites were returned to the Long Binh area for out-processing. In-country R&R personnel were dispatched directly to Vung Tau.
- d. DEROS and Replacement Personnel: Personnel returning to CONUS outprocessed at Long Binh through Bettalion and 54th Artillery Group facilities. Equipment turn-in was handled by battery personnel maintaining the base camp at Bien Hoa. Incoming personnel were processed through the same channels.
 - e. Treatment, Evacuation and Hospitalization of Personnel:
- (1) Dong Tam: While positioned at Dong Tam, medical facilities available were the 9th Surgical Hospital and the 61st Medical Detachment. Normal sick call was handled by the medical detachment.
- (2) Field Positions: Battlefield casualties were processed, as a rule, thru the hospital barge which normally accompanied the 3d Bn, 34th Arty. After screening, appropriate cases were transferred to the USS BANEWAH, where a surgical team was on standby to stabilize serious cases prior to evacuation to the surgical hospital at Dong Tam.
- (3) To prevent the occurrence of skin disease, instructions were issued to reduce the wearing of shirts to a minimum and to air feet as much as possible. Shower buckets were provided and every effort made to obtain sufficient water for showers. As a result no skin diseases developed.
- (4) During the hours of darkness, shirts were worn with sleeves rolled down. Despite the large number of mosquitos, no malaria cases developed.
 - (5) No health problems were encountered.
- f. Claims: In case of claims for damage resulting from US activities in a given area, the claimant should be referred to the district chief for all necessary paperwork and payment. This procedure was followed when two of the buildings adjoining Cai Ba's south landing site were partially demolished by ICU's during off-loading operations.
 - g. Relations with Local Populace::
- (1) Since about 1-80% of Dinh Thong Province was considered sympothetic to the enemy, all hamleds, villages and towns were declared off limits by the unit commander.
- (2) While occupying positions with ARVN or RF/PF Outposts, an amiable relationship developed between the Victnamese and American troops.
 - (3) Chose liaison was established with US Advisors and their and improve

h. Maintenance:

(1) Organizational Maintenance:

- (a) Due to the frequent moves executed by the battery and the number of rounds fired, vehicular and howitzer maintenance were of primary importance. In order to accomplish a maximum amount of work in a minimum amount of time, the authorized maintenance section was augmented by additional personnel. With two exceptions, the unit had only between one and three days between moves to make necessary repairs. Even during this period, vehicles and weapons were operationally committed to a great extent. Initially the whole maintenance section accompanied the battery when in the field. Experience, however, showed that only a small number of needed repairs could be accomplished due to space, equipment and tactical limitations. At that point the decision was made to establish and maintain maintenance facilities at the Dong Tom base and to leave vehicles for maintenance behind as deemed appropriate. Necessary PLL items, tools and one each artillery and wheeled vehicle mechanic continued to accompany the battery.
- (b) It was generally found that to designate a fixed maintenance time while in the field was not feasible due to the operational committments such as resupply convoys, moves and fire missions. While stationed at Dong Tam, all available time was devoted to maintenance and repairs.

(2) Support Maintenance:

- (a) Towards the end of the operation and with no new howitzers in sight, the decision was made to phase howitzers and M548's into the 2d Maint Bn at Vung Tau for a general overhaul and needed repairs. About 50% of the crew accompanied the vehicles. About two weeks before the battery left the Delta, a contact team with a turnet specialist in charge arrived from the 2d Maint Bn. All vehicles and howitzers were II'd and corresponsing requisitions submitted. Under the very capable and energetic leadership of the team chief, parts began to arrive.
- (b) Small arms, radios and associated items were repaired or repair parts furnished to the battery by E Co, 709th Maint Bn, a 9th Inf Div support unit.
- (c) Larts which at times were in critical and sudden demand and for which no sudden replacement was available, were hand made at a Navy machine shop anchored in the Dong Tam basin. Sample items were shafts for the manual traversing system, shifting forks for the M109 governor, etc.

(3) Primary Problems:

(a) M109 howitzer: The primary problem with the howitzer was automotive. Many of the problems were caused by the cooling system which appears to be underdosigned. Radiators sprung leaks repeatedly, causing engines to overheat. This in turn led to cracked heads and melted injector tips. Radiator fans became inoperative and broken gages and corresponding sending units could not be replaced. Fuel tanks sprung looks and were repaired as time became available. Engines were placed under particular strain because of inoperative air filter systems in four howitzers. Missing clamps, hoses and blower motors had been placed on Red Ball Expended requisition in August. At this time they have not yet been filled.

CONFIDENTIAL

Unfiltered air, highly contaminated by dust and sand, was thus permitted to be sucked directly into the supercharger without first passing through the air filters. The artillery portion of the weapon performed well. The only problems were seals which wore out through normal use and for which replacements were hard to find. The main concern in such a comparatively isolated location as Dong Tam was the replacement of spare parts. Qualified personnel to perform all necessary repairs were found within the battery itself. In order to reduce the deadline time, as much as was possible, each howitzer was called out of action for maintenance at least for a half day each week. At that time the breech mechanism was disassembled, all sliding surfaces deburred, and all parts and mechanisms serviced and lubricated as required.

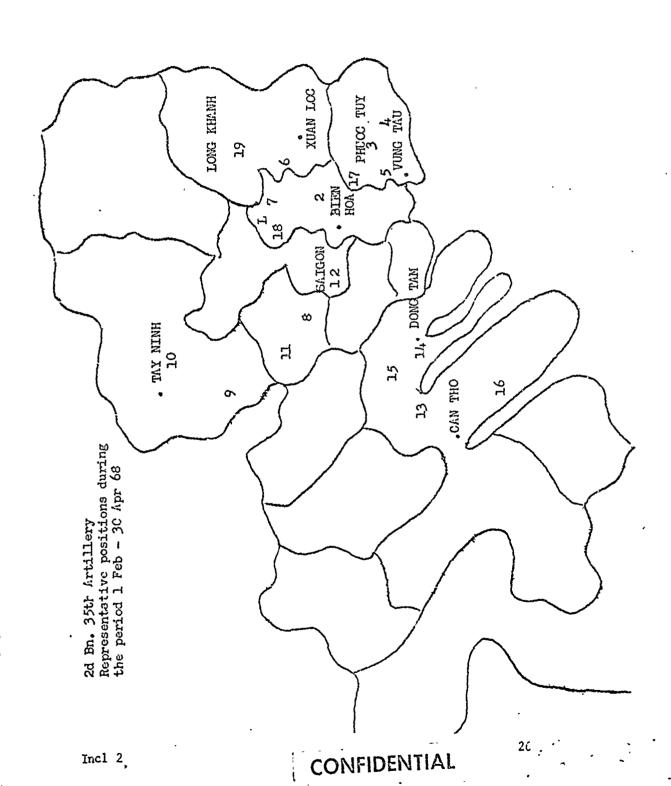
- (b) It was found that the M578 VTR was not capable of towing M109 howitzers for any distance. Since howitzers are the items most likely to break down, and the resulting recovery distances are normally considerable, a substitute vehicle for meeting towing requirements for a medium SP battery should be found.
- (c) M548 Cargo Carrier: Due to the problems encountered with the M548, this vehicle should be returned to the service test stage of development and subjected to vigorous tests. The concept of the vehicle is a good one, but breakdowns in the cooling system, transfer, transmission, and electrical system make it highly undependable in a convoy under combat conditions.
- (d) Wheeled Vehicles: No unusual problems developed among wheeled vehicles. Normal problems encountered were an occasional broken axle, steering difficulties, electrical shorts and worn out brakes. A considerable amount of tires were replaced. At times it was difficult to obtain 5-ton truck tires and inner tubes.
- (e) Betteries: Betteries of all types and acid were in short supply at all times during operations.
- (f) Nitrogen supply: Recommend that each firing battery operating independently in areas isolated from competent ordnance support be furnished with nitrogen and necessary gages and hoses. These items are required in order to service the howitzers nitrogen systems and optical instruments. Otherwise, unnecessary and unacceptable delays in the repair of the weapons will result.

11. Conclusions:

- a. That the employment of the M109 howitzer is feasible in the delta area of Vietnam.
- b. That the M109 howitzer is preferable to the M114 howitzer due to its inherent 6400 mil capability, case of placement and greater mobility and fire power. The need of trail pits and a hardstand for the pedestal make the M114 impractical in an area where the water level during the rainy season is above the level of the ground. A self-propelled unit with its direct fire capability and comparatively large number of machine guns may travel and be positioned with a smaller security element.
- c. That a medium artillory unit in the delta is a requirement. The more powerful projectile gives added punch against the well constructed enemy bunkers as well as enemy ground forces. The increase in range over the 105mm howitzers increases the reach of the friendly arms into areas where the enemy used to be immune to artillery fire.

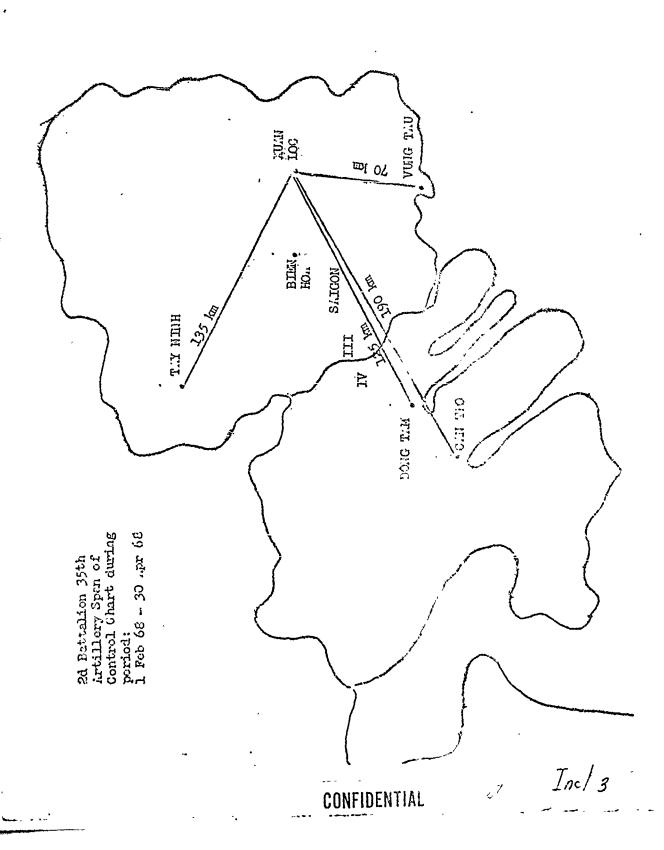
d. That the appearance of 155mm howitzers in an area where they were previously unknown, shifted the balance of power. Fires were made available to the local friendly forces and the mere sight of the armored vehicles gave new and impressive evidence and assurance of US involvement in a sector where assistance had previously been limited to largely advisory teams, only.

- e. That the riverine artillery and infantry units made full use of the battery by prepositioning it to cover the entry and egress from an operational area.
- f. That personnel adjusted themselves well to the prevailing combat conditions and that equipment withstood the rigors of combat, constant water and road travel very well.



KEY FOR INCLOSURE 2 2d How Bn, 35th Arty Representative Positions for Period 1 Feb 68 through 30 Apr 68

	UNIT	GRID	OPERATION \	MISSION
1	A Battery	XT 988323	Buena Vista	GSR 101st Abn Div Arty
2	A Battery	YT 026156	Uniontown	GSR 101st ibn Div irty
2	A Battery	YT 035175	Uniontown	GSR 101st Jbn Div Arty
24	A Battery	YS 432676		CS LIFF
4	A Battery	YS 493618	Pinaroo	GSR 4th R.FR
3	A Battery	Y3 432676		GSR 12th R.FR
5	A Battery	YS 248755		
3	A Battery	YS 432676		GSR 12th R.FR GSR 12th R.FR
5 3 6	B Battery	YT 207128	Coburg	GS IIFF
2	B Battery	YT 035175	Harrisburg	
7	B Battery	YT 043245	Box Springs	GSR 101st Abn Divarty GSR 2/40 irty
රි	B Battery	YT 026148	Harrisburg	GS IIFF
8	B Battery	XT 646162	Vilderness	GSR 25th Div .rty
9	B Battery	XT 261386	Milderness	Atch 25th GSA 2/40 arty
10	B Battery	NT 387625	Toen Thang	GSR 3/77 Arty
"	B Battery	XT 504193	Toan Thang	GS 25h Div
12	B Battery.	XS 731 46	Toan Theng	GSR 1/8th Arty
13	C Battery	1/8 978401	Coronado	don 1/8011 Arcy
14	C Battery	XS 409443	Coronado	CS 1st Bdc 9th D
15	C Bautory	XS 382494	Coronafo	DS 5/60th Inf
16	C Battery	IN 905845	Coronado	GR 3/34th .rty
14	C Battery	XS 409443	Coronado	GSR 3/34th arty
17	C Battery	YT 133082	Box Springs	GS IIFF
Ş	G Battery	YY 0351.75	Harrisburg	GS IIFF
78	C Battery	XT 969232	Harrisburg	GS IIFF RV Marinos
5	C Battery	YT 035175	Los Banos	GS IIFF
13	C Battery	YT 328268	Toan Thang	GSR 2/40th arty
6	C Battory	YT 208126	Toan Thang	GSR 2/40th in ty
	_			more whiter it of



		ROL-DATA - R.& D.
(Security classification of this body of abstract and	Indexing a	nanolation must be entered when the overall report is classified)
ORIGINATING ACTIVITY (Corporate suther)		20. REPORT SECURITY CLASSIFICATION
OACSFOR, DA, Washington, D.C. 203	10	Classified
	•	2b. GROUP
harman sina na amin'ny taona mandronana amin'ny faritr'i Arabandrona amin'		4.
REPORT TITLE		
Operational Report Lessons Les 35th Artillery,	arned.	Headquarters. 2d Howitzer Battalion,
DESCRIPTIVE NOTES (Type of report and inclusive datos)		
Experiences of unit engazed in country authorist (First name, middle initial, isel name)	terinst	urgency operations. 1 Feb - 30 Apr 1968
•		` / _ , ,
CO; 2d Howitzer Battalion, 35th	A	<u>, , , , , , , , , , , , , , , , , , , </u>
do, 2d nowiczer Bactarion, 35th 2	veririe	ery .
REPORT DATE		78. TOTAL NO. OF PAGES 76. NO. OF REFS
	-	
1 May 1968		29
SECTIONS OF STREET NO.	•	es. ORIGINATOR'S REPORT NUMBER(S)
	•	682044
N/A		
• • • • • • • • • • • • • • • • • • • •		9b. OTHER REPORT NO(S) (Any other numbers that may be seeigned this report)
DISTRIBUTION STATEMENT		
•	* •	
•		
•.		
I THE STATE OF THE	<u>:</u>	Tan anaman and an
SUPPLEMENTARY NOTES		12. SPONSORING MILITARY ACTIVITY
• -	•	
N/A		OACSFOR, DA, Washington, D.G. 20310

AUSTRACT		
•		•
	•	
		• •
	•	
		1
		•
	2	29
	-	
		t

THIS REPORT HAS BEEN DELIMITED AND CLEARED FOR PUBLIC RELEASE UNDER DOD DIRECTIVE 5200.20 AND NO RESTRICTIONS ARE IMPOSED UPON ITS USE AND DISCLOSURE.

DISTRIBUTION STATEMENT A

APPROVED FOR PUBLIC RELEASE;
DISTRIBUTION UNLIMITED.